



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

PROCEEDINGS
OF THE
AMERICAN SOCIETY
OF MICROSCOPISTS

TENTH ANNUAL MEETING

HELD AT

PITTSBURGH, PA.

AUG. 30TH AND 31ST, AND SEPT. 1ST AND 2D, 1887.

COMMITTEE ON PUBLICATION:

T. J. BURRILL

D. S. KELLICOTT

S. M. MOSGROVE.

1888:

J. W. FRANKS & SONS, PRINTERS AND BINDERS,
PEORIA, ILLINOIS.

PROCEEDINGS
OF THE
AMERICAN SOCIETY
OF MICROSCOPISTS

TENTH ANNUAL MEETING

HELD AT

PITTSBURGH, PA.

AUG. 30TH AND 31ST, AND SEPT. 1ST AND 2D, 1887.

COMMITTEE ON PUBLICATION:

T. J. BURRILL

D. S. KELLICOTT

S. M. MOSGROVE.

OFFICERS OF THE SOCIETY.

PITTSBURGH MEETING.

PRESIDENT:

WM. A. ROGERS, A. M., HON. F. R. M. S. Waterville, Maine.

VICE-PRESIDENTS:

C. M. VORCE, F. R. M. S. Cleveland, Ohio.

JAMES E. REEVES, M. D. Wheeling, W. Va.

SECRETARY:

D. S. KELLICOTT, Ph. D., F. R. M. S. Buffalo, N. Y.

ASSISTANT SECRETARY:

S. M. MOSGROVE, M. D. Urbana, Ohio.

TREASURER:

GEO. E. FELL, M. D., F. R. M. S. Buffalo, N. Y.

EXECUTIVE COMMITTEE:

JOHN J. B. HATFIELD Indianapolis, Ind.

W. R. MANDEVILLE, M. D. New Orleans, La.

W. A. CLAPP, M. D. New Albany, Ind.

PAST PRESIDENTS,

Ex-Officio Members of the Executive Committee:

R. H. WARD, M. D., F. R. M. S. Troy, N. Y.

H. L. SMITH, LL. D., HON. F. R. M. S. Geneva, N. Y.

J. D. HYATT New York City.

GEO. E. BLACKHAM, M. D., F. R. M. S. Dunkirk, N. Y.

ALBERT MCCALLA, Ph. D. Lake Forest, Ill.

J. D. COX, LL. D., F. R. M. S. Cincinnati, Ohio.

T. J. BURRILL, Ph. D., F. R. M. S. Champaign, Ill.

CONTENTS.

	PAGE.
I.—Annual Address of the President : The Microscope as a Factor in the Study of the Behavior of Metals under Variations of Temperature. By William A. Rogers..	5
II.—A Contribution to the Life History of the Diatomaceæ. —Part II. By Hamilton L. Smith.....	126
III.—I. Microscopical Tube Length, and the Parts included in it by the Various Opticians of the World. II. The Thickness of Cover-Glass for which Unadjustable Objectives are corrected. By Simon H. Gage	168
IV.—Shrinkage of Cement-Cells the Cause of Leakage and Creeping in Glycerin Mounts. By Frank L. James....	173
V.—Additional Notes on a Certain Species of Rotifera. By D. S. Kellicott.	181
VI.—Some New and Rare Infusoria. By D. S. Kellicott	187
VII.—Determination of the Number of Trichinæ or other Animal Parasites in a Given Quantity of Meat. By Simon H. Gage	191
VIII.—Disease Germs : Another Illustration of the Fact that Bacteria Cause Disease. By T. J. Burrill.	193
IX.—Ending and Relation of the Muscular Fibers in the Muscles of Minute Animals (Mouse, Mole, Bat, and English Sparrow)—Abstract. By Susanna S. Phelps Gage	207
X.—The Bacillus of Foot-Rot in Sheep, By Mark Francis..	209
XI.—Note on a Microscope presented by Linnæus to Bernard Jussieu in 1738. By Jacob F. Henrici.....	214
XII.—The Comparative Size of Blood Corpuscles of Man and Domestic Animals. By Freda Detmers	216
XIII.—On a Microscopical Slide-Catalogue. By R. H. Ward..	233
XIV.—The Tape-Worm; Methods of Preparation for the Museum and the Microscope, By J. M. Stedman	242

	PAGE.
XV.—A Description of <i>Ergasilus Chautauquaensis</i> ; A new Species of Copepoda and a List of other Entramos-traca found at Lake Chautauqua, in August, 1886. By Charles S. Fellows.....	246
XVI.—Note on a New Rotifer — <i>Gomphogaster Areolatus</i> . By C. M. Vorce.....	250
XVII.—The Fallacies of Popular Bacterial Research. By Geo. W. Lewis.....	254
XVIII.—On the Use of the Amplifier, with Observations on the Theory and Practice of Photo-Micrography, suggested by the Design of a New Photo-Micro-Camera. By Geo. W. Rafter	263
XIX.—Cardiac Muscle Cells in Man and Certain Other Mammals. By Bordman L. Oviatt.....	283
XX.—Comparison of Centimeter Scale, "Fasoldt II," with Centimeter Scale "A." By Marshall D. Ewell.....	299
XXI.—The Erysipheæ of Illinois. By T. J. Burrill.....	301
XXII.—Note on Microscopical Exhibitions. By R. H. Ward....	311
XXIII.—The Crystallography of Butter and Other Fats. By Thomas Taylor.....	315
XXIV.—REPORTS :	
Remarks on a Fasoldt Test Plate	318
Upon a Collection of Slides.....	322
Treasurer and Custodian	324
Spencer and Tolles Fund.....	326
XXV.—NECROLOGY :	
Memoir of Allen Y. Moore, M. D.....	327
Myron C. Davis	333
XXIII.—Minutes	334